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54 Collecting reservoir for waste fluids.

57 A collecting reservoir for waste motor oil, having a housing (1) with therein at least one holder (6a) for the oil and accessible via a first opening (14) in the housing and a collecting space (20) for the oil containers accessible via a second opening (18) in the housing (1).

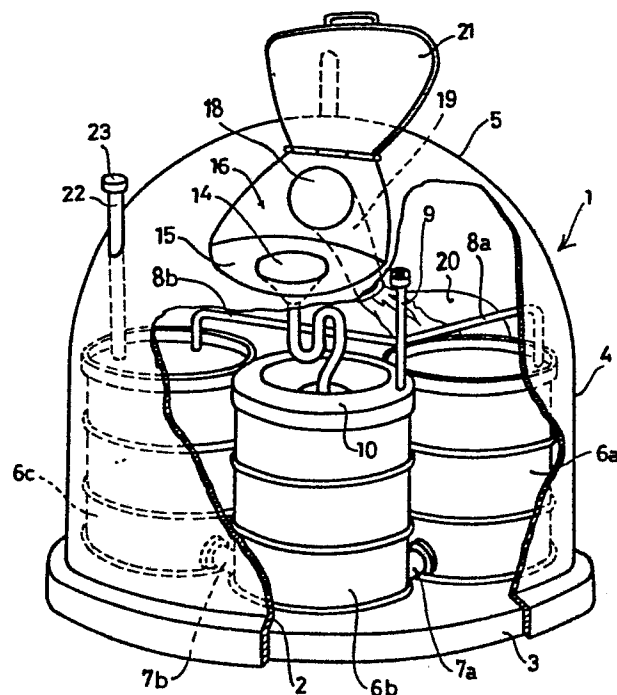


FIG. 1.

Collecting reservoir for waste fluids.

The invention relates to a collecting reservoir for waste fluids supplied in containers or the like, more particularly waste motor oil.

The pollution of environment, caused by waste fluids
5 and particularly by waste motoroil is an ever increasing problem. The sharply risen costs of servicing has as a result that an increasing number of owners changes the motoroil themselves, the more so because cheap oil is easily obtainable in warehouses but the
10 waste oil is mostly deposited into the sewer which in its turn leads to ever increasing problems in the cleaning of the sewer fluid as oil is difficult to remove. Moreover a small amount of oil contaminates a big amount of water sothat the practice of some
15 motorists to deposit the waste oil in the ground greatly worries the authorities in water producing areas.

It is to be expected that, when there were only easily accessible and easy to be operated collecting reservoirs for waste oil a great part of the waste oil which now ends up into the environment would lead to it that waste oil should be deposited therein, as experience with the wellknown glass collecting boxes has learned that the average citizen is certainly not unwilling to use such collecting reservoirs if only they would be easily accessible and simply in use.

The invention aims to provide such a collecting reservoir for particularly waste oils. According to the invention this is characterised by a housing which encloses at least one liquid holder which is accessible via a first duct which leads into a first opening formed in the housing, and also containing a collecting space for the containers, which is accessible via a second wide duct which also leads into an opening formed in the housing.

By providing in one housing at least one holder for the waste fluid and separate therefrom a, separately accessible space for the containers the waste oil can be disposed off quite easily: the container (oil can, bottle) is first emptied into the opening that is

meant for that purpose and thereafter the container is deposited in the collecting space.

A preferred embodiment is characterised in that the housing consists of a cylindrical lower part and
5 adjoining the same a hemispherical upper part, in which a chamber is formed which is defined by a flat bottom part, in which the opening of the first duct is formed, and an ascending wall part having therein an opening giving access to the duct leading
10 into the container collecting space.

Not only has such a reservoir an attractive look but also the handling of the containers in such a reservoir is quite easy: the opening provided in the bottom of the chamber, which is preferably counter-
15 sunk, makes it easy to empty the container without spillage.

Preferably the collecting space is formed by a removable bag.

As waste oil has a certain value preferably provision
20 is made to prevent the unauthorized emptying of the first holder. To this end an S-trap is provided in the first duct and the closable standpipe leads into the holder; the holder can be emptied by means of a suction device through said standpipe.

A favourable situation of the several holders is obtained when the first holder is formed by three interconnected part holders disposed at the corners of a triangle and the container collecting
5 space is defined by these part holders and the housing wall.

The invention is elucidated on the hand of the drawing.

Fig. 1 shows perspectively, partly cut-out, a preferred
10 embodiment according to the invention;

Fig. 2 shows schematically in elevation the various containers;

Fig. 3 is a vertical cross section of the two openings.

Figure 1 shows a reservoir indicated as a whole with
15 reference numeral 1 and consisting of the housing wall 2 adjacent a base 3. Housing 2 has a cylindrical lower part 4 and a hemispherical upper part 5. Three holders 6a, 6b, 6c are disposed on the base 3, each consisting of a commercially available oil drum known
20 per se. At the bottom the three holders 6a, 6b, 6c are interconnected via the ducts 7a, 7b and at the top via the venting ducts 8a, 8b, which lead to the central venting duct 9. The holders 6a, 6b are closed at the

top while the holder 6b is covered at the top by a flame-killing lid 10 having a central opening 11. The use of a flame-killing lid of this kind is known per se, e.g. for waste bins.

5 The oil supply duct 12 containing the S-trap 13 leads into the central opening 11. The other end of this duct terminates in the opening 14 which is counter-sunk in the bottom part 15 of a recess 16 in the upper part 5 of the reservoir. This recess has an
10 obliquely sloping front wall 17 with an opening 18 leading to an obliquely downwardly extending duct 19 terminating in a waste bag 20. The latter is disposed in the space between the holders 6a, 6c on the one hand and the wall of the housing part 4 on the other
15 hand. Recess 16 can be closed by the hinged lid 21, the shape of which matches the shape of the upper part.

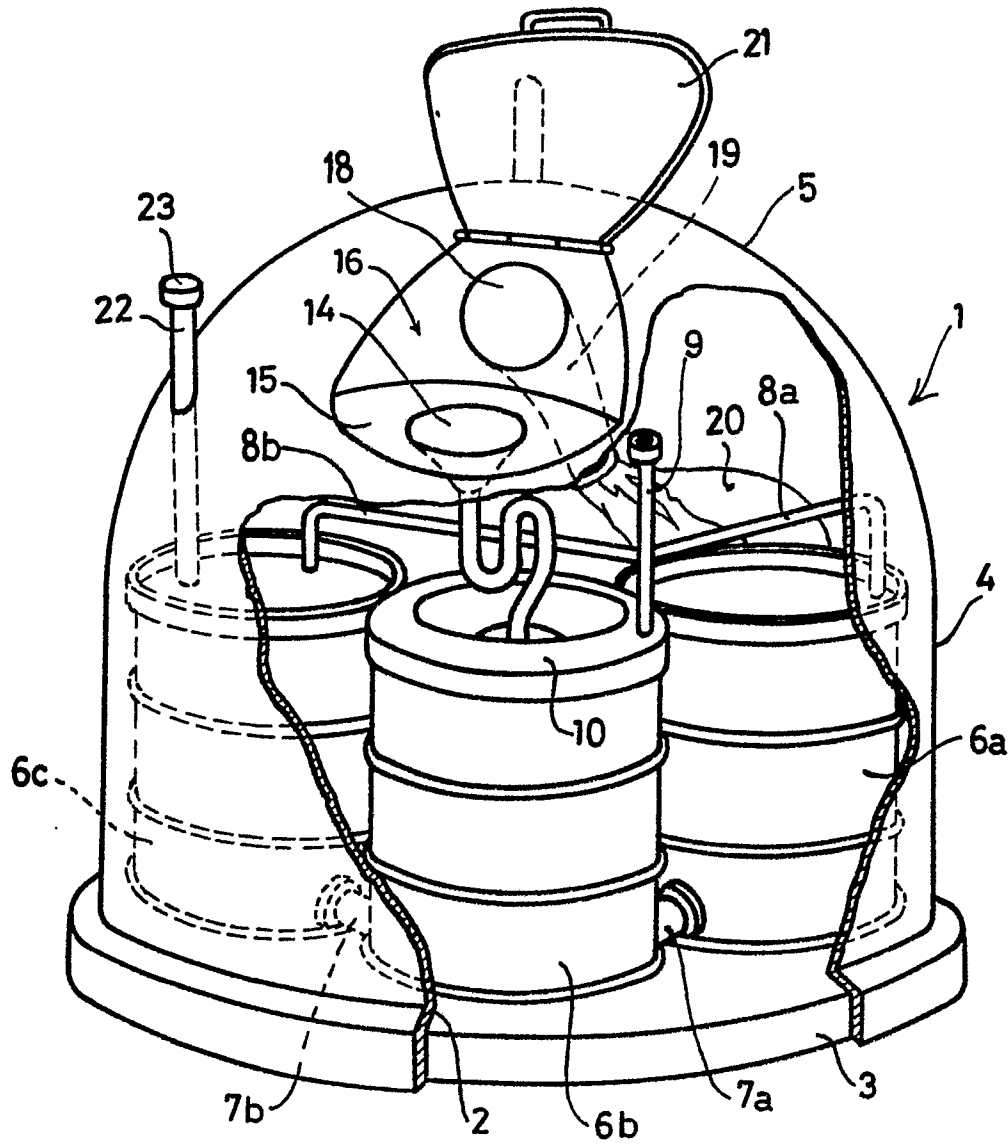
To enable the filled holders 6a, 6c to be emptied, holder 6c bears a standpipe 22 extending to outside
20 the reservoir and closed by a sealable cap 23. The holders 6a, 6b and 6c can be rapidly emptied by a suction device known per se.

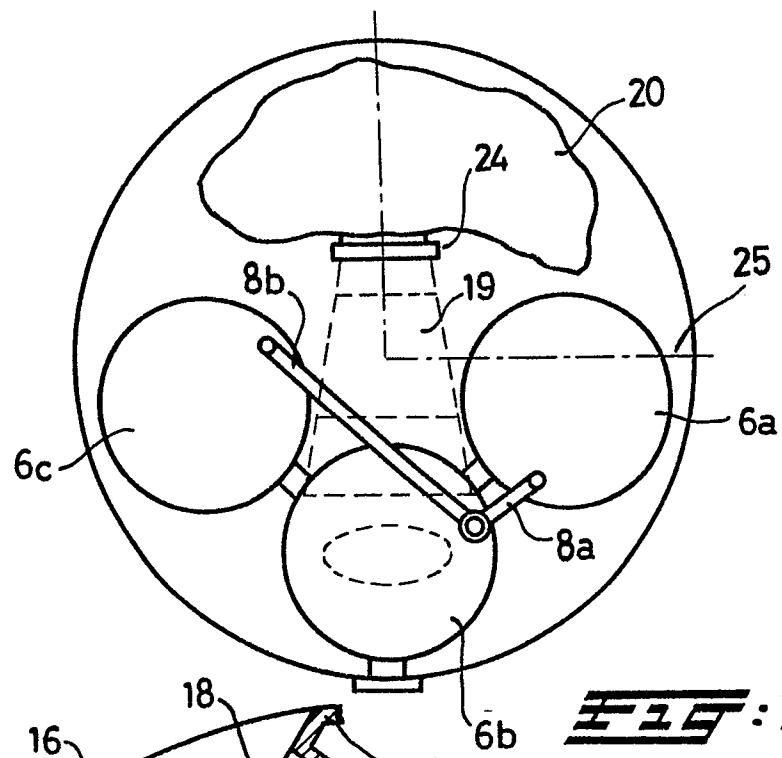
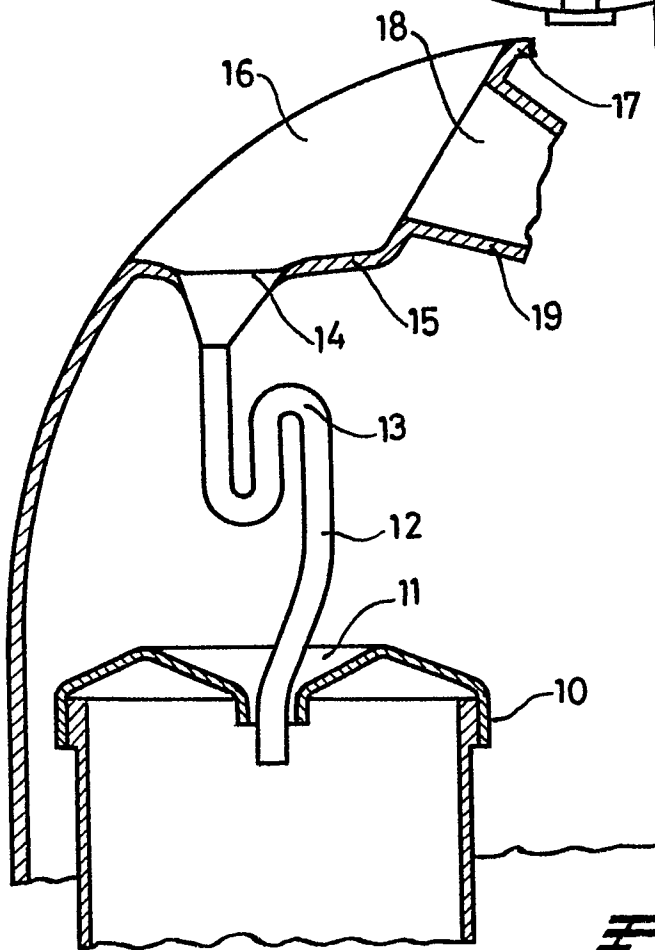
Waste bag 20 can be detachably secured to duct 19 in any suitable way, e.g. by means of the resilient clamp ring 24. Part of the wall of the reservoir can be adapted to swing away as indicated diagrammatically
5 by reference 25 in Figure 2, in order to permit removal of the waste bag 20.

Claims:

1. A collecting reservoir for waste fluids supplied in containers or the like, more particularly waste motor oil, characterised by a housing (1) which encloses at least one liquid holder (6a) which is accessible via a first duct (12) which leads into a first opening (14) formed in the housing (1), and also containing a collecting space (20) for the containers, which is accessible via a second wide duct (19) which also leads into an opening (18) formed in the housing (1).
2. A reservoir according to claim 1, characterised in that the housing (1) consists of a cylindrical lower part (4) and adjoining the same a hemispherical upper part (5), in which a chamber (16) is formed which is defined by a flat bottom part (15), in which the opening (14) of the first duct (12) is formed, and an ascending wall part having therein an opening (18) giving access to the duct (19) leading into the container collecting space.
3. A reservoir according to claim 1 or 2, characterised in that the container collecting space is formed by a removable bag (20).

4. A reservoir according to claims 1 to 3,
characterised in that an S-trap (13) is provided
in the first duct (12) and a closable standpipe (22)
leads into the first holder.
- 5 5. A reservoir according to claims 1 to 4,
characterised in that the first holder is formed by
three interconnected part holders (6a, 6b, 6c)
disposed at the corners of a triangle and the container
collecting space is defined by these part holders
10 and the housing wall.



**FIG. 2.****FIG. 3.**



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EUROPEAN SEARCH REPORT

0102126

Application number

EP 83 20 1221

DOCUMENTS CONSIDERED TO BE RELEVANT			
Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (Int. Cl. *)
A	US-A-2 199 970 (MITCHELL) * Whole document *	1	B 65 F 1/04 F 16 N 31/00
A	US-A-2 063 507 (KARPER) * Page 2, left-hand column, line 37 - right-hand column, line 56; figures 5-8 *	1,2	
A	US-A-3 029 012 (LESLIE) * Whole document *	3	
A	US-A-1 481 685 (BURROWS)		
A	DE-C- 679 125 (PINTSCH)		
A	US-A-3 156 270 (ERICKSON)		
The present search report has been drawn up for all claims			
Place of search THE HAGUE		Date of completion of the search 29-11-1983	Examiner MARTENS L.G.R.
CATEGORY OF CITED DOCUMENTS		T : theory or principle underlying the invention E : earlier patent document, but published on, or after the filing date D : document cited in the application L : document cited for other reasons & : member of the same patent family, corresponding document	
X : particularly relevant if taken alone Y : particularly relevant if combined with another document of the same category A : technological background O : non-written disclosure P : intermediate document			